

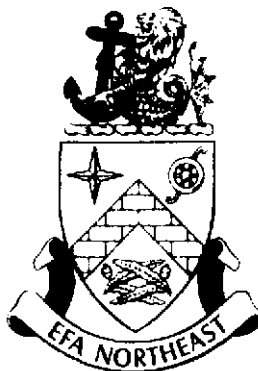
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SDMS DocID **206729**

**Record of Decision  
for Area of Concern 35  
Pistol Range  
Naval Air Station South Weymouth  
Weymouth, Massachusetts**

Contract No. N62472-92-D-1296  
Contract Task Order No. 0075



Department of the Navy  
Engineering Field Activity Northeast  
Naval Facilities Engineering Command  
10 Industrial Highway, Mail Stop 82  
Lester, Pennsylvania 19113-2090

December 2004  
FINAL  
29600.75.2100

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Naval Air Station South Weymouth  
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**PART 1—DECLARATION**

**I. SITE NAME AND LOCATION**

Naval Air Station (NAS) South Weymouth  
1134 Main Street  
Weymouth, Massachusetts 02190  
NPL No. MA2170022022  
Area of Concern 35 – Pistol Range

Appendices provided herein include the following:

Appendix A – Massachusetts Department of Environmental Protection Letter of Concurrence  
Appendix B – References  
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Appendix E – Transcript of Public Hearing on the Proposed Plan for Area of Concern 35.

**II. STATEMENT OF BASIS AND PURPOSE**

This decision document presents the No Further Action decision for Area of Concern (AOC) 35, the Pistol Range, at the former NAS South Weymouth, Weymouth, Massachusetts. The decision was made in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 USC § 9601 *et seq.*, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and to the extent practicable, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR Part 300 *et seq.*, as amended. The regulatory program performed under the context of these combined laws and regulations is commonly referred to as “Superfund.”

This decision is based on the Administrative Record, which has been developed in accordance with Section 113(k) of CERCLA, and which is available for review at the Navy’s Engineering Field Activity Northeast (EFANE) office located in Lester, Pennsylvania. Local to the site, public information repositories are also maintained at the Tufts Library in Weymouth, Massachusetts; the Abington Public Library in Abington, Massachusetts; the Hingham Public Library in Hingham, Massachusetts; the Rockland Memorial Library in Rockland, Massachusetts; and the Department of the U.S. Navy Caretaker Site Office (CSO) in Weymouth, Massachusetts. The Administrative Record Index (Appendix D) identifies each of the items comprising the Administrative Record upon which the selection of this decision is based.

This decision had been selected by the U.S. Navy and the U.S. Environmental Protection Agency (EPA). The Massachusetts Department of Environmental Protection (MADEP) concurs with the No Further Action decision (Appendix A).

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### **III. DESCRIPTION OF THE SELECTED DECISION**

This Record of Decision (ROD) sets forth the No Further Action decision for AOC 35, the Pistol Range, at NAS South Weymouth.

The No Further Action decision for AOC 35 is based on the Navy's successful completion of two removal actions conducted at the site. First, the Navy conducted a CERCLA Time-Critical Removal Action (TCRA) to address soil that contained elevated concentrations of lead (from past Pistol Range operations) through excavation and offsite disposal. Post-excavation soil sampling results confirmed that the cleanup goal was achieved and that lead concentrations in soil are below EPA's risk-based screening criterion for unrestricted use. Second, the Navy removed the site's earthen "de-armament embankment" and disposed the soil offsite. The embankment was built in 1955 as a safety precaution for armed aircraft on the East Mat tarmac that would be pointed towards the embankment in case of accidental firing. The Navy found no record that arms from aircraft were ever discharged to the embankment, and through its investigations, the Navy found no evidence that unexploded ordnance (UXO) or munitions-related compounds were present. However, this removal was conducted as a precautionary measure to eliminate liability and ensure that no UXO or munitions compounds were present in the soil embankment. Post-excavation soil sampling results for other constituents were within acceptable levels for unrestricted use. The presence of volatile organic compounds in groundwater at AOC 35 is attributed to an upgradient site, Site 11 – Former AOC 108, and not to AOC 35 itself. The Navy is working with EPA and MADEP to address Site 11 separately from AOC 35 under the Navy's Installation Restoration Program, which is similar to the federal CERCLA program.

AOC 35 is one of several AOCs currently on record at NAS South Weymouth. AOC 35 has been addressed independently from the rest of NAS South Weymouth, and therefore, the Navy can proceed with closure of this site as soon as it has met the requirements of the Superfund process. The signing of this No Further Action ROD by the Navy and EPA Region 1 authorizes the completion of the Superfund process for AOC 35. The No Further Action decision for AOC 35 is not expected to have any impact on the strategy or progress for the rest of the environmental investigations at NAS South Weymouth.

### **IV. STATUTORY DETERMINATIONS**

No further cleanup action is necessary at AOC 35 under CERCLA to ensure protection of human health and the environment. Because the lead removal action at this site reduced soil contamination to levels that allow for unrestricted use, and the removal of the de-armament embankment confirmed that no ordnance or explosive compounds were present, no additional actions, investigations, monitoring, or 5-year reviews will be required.


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**V. AUTHORIZING SIGNATURES**

This ROD documents that No Further Action is necessary to ensure protection of human health and the environment for AOC 35, the Pistol Range, at the former NAS South Weymouth. The Navy and EPA have selected this decision, with concurrence by MADEP.

Concur and recommended for immediate implementation:

By:   
BRAC Environmental Coordinator  
Caretaker Site Office  
Naval Air Station South Weymouth  
U.S. Department of the Navy

Date: 2/4/05

By:   
Director, Environmental Restoration Division  
Engineering Field Activity Northeast  
Naval Facilities Engineering Command  
U.S. Department of the Navy

Date: 2/1/05

U.S. Environmental Protection Agency, Region 1

By: Susan Studer  
Director, Office of Site Remediation and Restoration  
Region 1 – New England  
U.S. EPA

Date: 02/10/05

## PART 2—DECISION SUMMARY

### I. SITE NAME, LOCATION, AND DESCRIPTION

The former NAS South Weymouth is located in the City of Weymouth and the Towns of Abington and Rockland, Massachusetts (Figure 2-1). Pursuant to CERCLA, the EPA placed NAS South Weymouth on the National Priorities List (NPL) in May 1994. During its operational period, NAS South Weymouth was owned by the U.S. Government and was operated by the Department of the Navy. The Department of Defense (DoD) first developed the Base during the 1940s to support dirigible aircraft that patrolled the North Atlantic during World War II. The Base was closed at the end of the war and later reopened in 1953 as a Naval Air Station for aviation training. NAS South Weymouth was in continuous use since that time until it was operationally closed on 30 September 1996 and administratively closed on 30 September 1997. It was then placed in caretaker status under the supervision of Naval Facilities Engineering Command, Northern Division, now known as the Engineering Field Activity Northeast (EFANE). The Department of the Navy is the lead agency, and EPA is the support agency, for CERCLA activities at NAS South Weymouth. The DoD is the sole source of cleanup funding for the property. There are several Operable Units and AOCs within the NAS South Weymouth NPL site (MA2170022022) that the Navy is addressing under CERCLA. This ROD pertains to AOC 35 – Pistol Range.

AOC 35 comprises approximately 2 acres of land located in the central portion of the NAS towards the eastern property line in the town of Weymouth (Figure 2-1). AOC 35 is located north of the “East Mat” tarmac, which was formerly used by the Navy for aircraft parking and maintenance. The site formerly contained small buildings and a large earthen embankment that was approximately 300 ft long by 150 ft wide by 30 ft high (Figure 2-2). The embankment doubled as a pistol range backstop and de-armament embankment as a safety precaution for aircraft parked on the East Mat.

Currently no structures remain onsite. The Navy has removed the buildings and de-armament embankment. The site is now a relatively flat, grass-covered field with a slight topographic slope toward the south. Undeveloped forested wetlands abut the site to the west, north, and east. The East Mat tarmac is located to the south of the site. A small drainage ditch runs between the site and the East Mat. The Navy also is investigating the ditch under the AOC program (AOC 60 – East Mat Ditch) separately from AOC 35.

### II. SITE HISTORY AND ENFORCEMENT ACTIVITIES

#### A. Site History

The DoD obtained the property in the 1940s, but the AOC 35 site remained undeveloped until October 1955 when the Navy constructed the de-armament embankment. The embankment was designated Building (Structure) No. 88. The Navy constructed the embankment as a safety precaution for the de-arming of aircraft on the adjacent East Mat tarmac. Armed aircraft on the

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East Mat were pointed towards the embankment so that any accidental firing of the aircrafts' guns would be stopped by the embankment. Shortly thereafter, the Navy utilized the back (north) side of the embankment as a backstop for small arms training. Building 109 (Training Material Storage Shed) was constructed in or about 1956 and was a 98 square foot small arms range storage building. The small arms training activity ceased in or about 1983 and the storage shed was demolished in 1985. Afterwards, the Navy used the former Pistol Range area for active recreation (volleyball) from the mid-1980s until the early 1990s, when the Picnic Area Shed (Building 125) collapsed.

## **B. History of Site Investigations**

The following sections provide an overview of the completed investigations at AOC 35. Full details regarding the soil investigations are available for review in the June 2000 *Time-Critical Removal Action Memorandum* and the March 2004 *Closeout Report* for the embankment removal. The *Cleanup Activity Report* for the 1999 TCRA is included as an appendix to the 2004 *Closeout Report*. Information pertaining to the groundwater conditions at the site is available for review in the September 2004 documents for AOC 35 entitled the *Phase II EBS Field Report* and the *EBS Phase II Project Memorandum*.

### Phase I Environmental Baseline Survey (EBS)

The Navy performed a *Phase I EBS* (Stone & Webster 1996) to assess the environmental condition of the Base property. Areas that required further investigation for potential contamination were designated Review Item Areas (RIAs). The Pistol Range was the 35<sup>th</sup> such RIA identified at NAS South Weymouth due to concerns that lead from spent ammunition rounds could be present in soil or groundwater.

### Phase II EBS Work Plan

The Navy developed a *Phase II EBS Work Plan* (Stone & Webster 1998) to assess the RIAs identified in the *Phase I EBS*. At the time the Work Plan was finalized, the Navy had decided to contract their Remedial Action Contractor (RAC) to complete an investigation in conjunction with a removal action at the Pistol Range rather than sampling as part of the Phase II EBS. This step was taken due to the high probability that there would be elevated levels of lead in soil from spent ammunition, based on the Navy's experience at other pistol ranges across the country. Subsequently, that action was deemed a TCRA under CERCLA.

### Time-Critical Removal Action

The Navy developed a *Time-Critical Removal Action Memorandum* (FWENC 2000) to document the decision to conduct the removal under CERCLA. The TCRA consisted of screening of soil for metal debris and UXO, multiple rounds of soil sampling, and soil excavation. The Navy established a cleanup goal of 300 milligrams per kilogram (mg/kg) of lead in soil, which was lower than EPA's risk-based residential preliminary remediation goal (PRG) of 400 mg/kg, and equal to the Massachusetts S-1/GW-1 criterion.

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A Schonstedt magnetic locator was used to conduct an initial surface magnetometer screen for UXO across the embankment. Then the embankment was clear-cut of any standing vegetation. A search pattern consisting of 1- to 1.5-ft overlapping lanes was then used to conduct an UXO sweep over the north and south sides of the embankment to ensure complete coverage. The magnetic survey was done only on the surface, since ordnance penetration would be limited to a few feet in depth. From the magnetometer survey and direct inspection, no UXO or ferrous metal debris was found.

A 20-ft × 20-ft grid extending from the shooting stand to the sloped, north side of the embankment (backstop) was employed for sampling the Pistol Range soil. Gridding and soil sampling was not conducted on the de-armament (south) side of the embankment because no metal debris or UXO were found on the south side of the embankment, and records did not indicate that the south side of the embankment had ever been used. Two samples were collected from each sampling grid: one samples from the 0- to 6-in. interval and a second sample from the 6- to 12-in. interval below ground surface (bgs). The targeted depth was deemed appropriate because the maximum depth of penetration of ordnance is approximately 12 in., assuming small arms and M-16 rifle rounds for the pistol side of the embankment, according to the U.S. Army Field Manual (FM 5-34) for Engineering Field Data. When field sampling results indicated that contamination extended to 12 in. in some areas, sampling continued in these areas in 6-in. increments until contaminant levels were below cleanup criteria. Soil samples were collected with a hand auger in 6-in. intervals up to a maximum depth of 18 in. bgs.

Four additional soil samples were later collected from the grid points that were found to contain lead concentrations above the cleanup goal. Based on the results of that second round of sampling, a third round of sampling was conducted to collect 6 additional samples to further delineate the extent of lead in soil. More than 100 samples from the 20-ft sampling grids were field-screened onsite for lead, copper, zinc, and antimony using a Spectrace 9000 Portable Field X-ray Fluorescence (XRF) Instrument. Of these, 27 were submitted for offsite laboratory analysis for Target Analyte List (TAL) metals. The Navy selected a cleanup goal of 300 mg/kg, consistent with the Massachusetts Contingency Plan (MCP) Method 1 S-1 soil standard under 310 CMR 40.0975. The screening and confirmatory sampling results identified eight locations within the grid with lead concentrations in the 0- to 6-in. interval that contained lead above the cleanup goal, with a maximum detection of 580 mg/kg of lead.

The Navy then excavated the eight grid locations containing soil that exceeded the selected cleanup goal of 300 mg/kg of lead. A total of 133.23 tons of soil were removed during the TCRA and were disposed at an offsite, licensed landfill. The Navy conducted the removal on an iterative basis, removing soil and testing, until it determined that the remediation goal had been achieved at all locations, based on results from post-removal confirmatory samples. Confirmatory samples were collected from the center of the floor of each excavated grid area. The sample was collected from the next consecutive vertical 6-inch interval below the floor of the excavation. The samples were analyzed for TAL metals by a fixed-based laboratory. The final confirmatory sample results were less than the cleanup goal, with a maximum detected value of 270 mg/kg of lead. Results for other inorganic constituents (metals) detected in site soil

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were generally below EBS Phase II risk-based screening benchmarks and were at acceptable levels in comparison with NAS South Weymouth basewide background levels.

Supplemental Sampling - 2002

In 2002, the Navy agreed to install three monitoring wells at AOC 35 to confirm that lead from the Pistol Range had not affected groundwater in the area, although lead under most conditions adsorbs to soil and does not readily migrate to groundwater. In 2002, the Navy installed and sampled MW10-302, located upgradient of the Pistol Range. The sample (plus duplicate) was analyzed for TAL metals. Two planned downgradient wells could not be installed because of drilling conditions (refusal on boulders or rock). No elevated lead concentration was detected. The Navy subsequently decided to remove the de-armament embankment, and rescheduled the installation of the downgradient wells until after the removal to allow for easier access to the locations in the field.

De-armament Embankment Removal - 2003

As documented in the *Closeout Report* (Tetra Tech FW 2004), the Navy removed the de-armament embankment and disposed of the soil at an offsite, licensed landfill in 2003. This second removal was a precautionary measure as part of the Navy's Munitions Response Program to demonstrate unequivocally that no UXO or munitions compounds were present and that the site would be suitable for its intended reuse (open space). Prior to excavation, nitroaromatics samples were collected to determine the presence/absence of munitions compounds such as TNT, RDX, HMX, and other degradation byproducts. The samples were collected at random points at depths ranging from 0 to 12 ft on the de-armament side of the embankment. Also prior to excavation, an UXO clearance was performed at the site to confirm that no UXO was present. Prior to the excavation of each lift from the embankment, a Schonstedt magnetic locator was used to confirm the absence of UXO. Upon confirmation that no UXO was present, the lift was excavated and direct-loaded into trucks for disposal. A total of 27,339.10 tons of soil was removed. Waste characterization samples were collected *in situ* from 30 random points in the embankment on all sides and from multiple depths. UXO sweeps were also conducted during the sampling. Waste characterization samples were analyzed for Resources Conservation and Recovery Act (RCRA)-8 metals, Toxicity Characteristic Leaching Procedure (TCLP)-lead, total petroleum hydrocarbons (TPH), polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), and conductivity. Once excavation had reached original virgin material, confirmation samples were collected and analyzed for VOCs, SVOCs (including polycyclic aromatic hydrocarbons [PAHs]), pesticides, PCBs, and TAL metals.

Supplemental Sampling- 2004

In Winter 2004, the Navy installed and sampled two additional groundwater monitoring wells at the site: MW10-303 and MW10-304. The samples were analyzed for TAL metals, VOCs, and nitroaromatics (explosives-related compounds) to determine whether groundwater had been impacted by past Pistol Range/de-armament operations. Water levels from these and other wells

associated with AOC 108 were gauged in May 2004 to assess groundwater flow direction. Groundwater flow near the embankment was towards the south (Figure 2-2).

In Summer 2004, the Navy gauged water levels again. The water table was several feet lower and groundwater flow was estimated to be toward the south-southeast near the former embankment. To confirm that groundwater downgradient of the soil removal areas had not been impacted, the Navy installed and sampled one additional temporary wellpoint: GW10-341. The sample was analyzed for total dissolved lead.

### **C. History of CERCLA Enforcement Activities**

In May 1994, NAS South Weymouth was listed on EPA's NPL, indicating that the NAS South Weymouth property was a priority for environmental investigation and cleanup. The Navy has conducted environmental studies and activities at NAS South Weymouth in accordance with CERCLA and the NCP. Based on the designation of NAS South Weymouth property as an NPL site, a Federal Facility Agreement was executed by the Navy and EPA, which became effective in April 2000. This agreement establishes the Navy as the lead agency for the investigation and cleanup of designated sites within NAS South Weymouth property, with EPA providing oversight. MADEP is not a party to the Federal Facility Agreement. In accordance with CERCLA and the NCP, MADEP has participated in ongoing discussions and strategy sessions, and provides oversight and guidance through their review of CERCLA documents.

## **III. COMMUNITY PARTICIPATION**

The Navy has worked to keep the community involved throughout the investigation process. The Navy has kept the community and other interested parties apprised of NAS South Weymouth environmental activities through informational meetings, fact sheets, press releases, public meetings, regular contact with local officials, and a public website. Also, the Navy meets on a regular basis to discuss the status and progress of the environmental programs with the Restoration Advisory Board (RAB), which is comprised of community leaders, government agency representatives, and local citizens who gather to discuss the progress of the environmental programs at NAS South Weymouth. Representatives from the Navy, EPA Region 1, MADEP, and local government have attended the public meetings and hearings. The following is a brief chronology of public outreach efforts for AOC 35:

- In September 1995, the Navy initiated a series of public meetings, at which the RAB process was explained and community members were asked to join the RAB. A sufficient number of volunteers assembled, and RAB meetings began in March 1996. Since that time, RAB meetings have been held on a monthly basis to keep the RAB and local community informed of the progress of the environmental investigations. The Navy has prepared and distributed minutes from each of the RAB meetings. Recent meeting minutes have been available to the public on the Navy's public website for environmental activities at the former NAS South Weymouth (<http://weymouthnas.eaest.com>).

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- In March 1996, the EPA and MADEP awarded the North and South Rivers Watershed Association (NSRWA) a Technical Advisory Grant (TAG). This TAG allowed the NSRWA to hire a Technical Advisor to review documents, attend meetings, and prepare evaluation reports. The Technical Advisor attended most RAB meetings and technical project meetings.
- In July 1998, the Navy released a community relations plan that outlined a program to address community concerns and keep citizens informed about and involved in remedial activities.
- In May 1999, the DoD gave the RAB for NAS South Weymouth a Technical Assistance for Public Participation (TAPP) grant. This grant allowed the RAB to obtain technical assistance from experts in the environmental field to help them understand the environmental cleanup programs at the Base.
- The Navy has distributed technical documents directly to the RAB members, including the EBS Decision Documents, the Closeout Report Action Memoranda, and field reports.
- The Navy gave a formal presentation about AOC 35 during the February 2004 RAB meeting as well as periodic updates on the site status during various public RAB meetings.
- On 17 September 2004, the Navy published a legal notice of the Proposed Plan for AOC 35 in the Patriot Ledger and the Abington-Rockland Mariner. It was also published in the Weymouth News on 22 September. The notice announced the public comment period and the meeting date for the public information session and public hearing. Announcements about the meeting were posted at the town halls. The Navy distributed copies of the Proposed Plan to a mailing list of nearly 400 community members. In addition, the Navy made the Proposed Plan available to the public at several established Information Repositories (listed below) and the Navy's public website for environmental activities at the former NAS South Weymouth (<http://weymouthnas.eaest.com>).
- From 20 September 2004 to 20 October 2004, the Navy offered the Proposed Plan for public comment, in accordance with the requirements of the NCP and the CERCLA program at NAS South Weymouth.
- On 14 October 2004, the Navy held an informational meeting to present the Navy's Proposed Plan to a broader community audience than had already been involved at the site. At this meeting, representatives from the Navy discussed the Proposed Plan and answered questions from the public. In addition, the Navy held a public hearing to accept oral comments on the Proposed Plan. A transcript of comments received at the public hearing is included as Appendix E.

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- During the comment period, no letters were received. Verbal comments were received from one person during the Public Hearing (Appendix E). As shown in Part 3 of this ROD, the Navy has responded to the comment in the Responsiveness Summary.

In addition, the Navy has provided an index of the Administrative Record available for public review, which is formally maintained at the Navy's EFANE office in Lester, Pennsylvania. Information repositories have also been established at several locations. Currently, information is available at the Tufts Library in Weymouth, Massachusetts; the Abington Public Library in Abington, Massachusetts; the Hingham Public Library in Hingham, Massachusetts; the Rockland Memorial Library in Rockland, Massachusetts; and the Department of the Navy CSO, Weymouth, Massachusetts. The Administrative Record Index is included as Appendix D to this ROD.

#### **IV. SCOPE AND ROLE OF OPERABLE UNIT OR RESPONSE ACTION**

In addition to several CERCLA Operable Units, the Pistol Range is 1 of 18 CERCLA AOCs identified at NAS South Weymouth, Massachusetts (Table 2-2). In general, the Operable Units and AOCs at NAS South Weymouth progress through the CERCLA cleanup process independent of one another. AOC 35 was originally identified in the Phase I EBS Report as RIA 35, due to the potential presence of lead in soil from ammunition fired at the Pistol Range. An RIA is an area requiring further evaluation due to the potential for contamination. If environmental impacts are found, then the Navy addresses the RIA under the appropriate program. At NAS South Weymouth, the Navy has designated RIAs from the EBS program as CERCLA AOCs when one or more CERCLA hazardous substances have been present in excess of human health or ecological risk benchmarks and background values. The Navy has then performed streamlined risk assessments or conducted removal actions at the AOCs. At AOC 35, the Navy elected to conduct a removal action to address lead in soil.

The ROD for AOC 35 is one component of the Superfund program at NAS South Weymouth. It has proceeded on an independent track from the other Operable Units and AOCs in order to enable the Navy to expedite site closure and property transfer. The signing of this ROD by the Navy and EPA Region 1 indicates the completion of the Superfund process for AOC 35. No additional actions or investigations of AOC 35 are required under CERCLA. Groundwater underlying the site is still under evaluation and will be addressed separately from AOC 35 in association with Installation Restoration (IR) Program Site 11 (Former AOC 108). The selected No Further Action decision for AOC 35 is not expected to have an impact on the strategy or progress for the remaining environmental investigation sites at NAS South Weymouth. Additional details on the strategy and schedule for the remediation of the other Operable Units at NAS South Weymouth are available in the Navy's Site Management Plan Report (EA 2003).

#### **V. SITE CHARACTERISTICS**

The following sections provide an overview of the analytical results from the completed investigations at AOC 35, as described in Section II.B of this ROD. Full details regarding the soil investigations are available for review in the June 2000 *Time-Critical Removal Action*

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*Memorandum* and the March 2004 *Closeout Report* for the embankment removal. The *Cleanup Activity Report* for the 1999 TCRA is included as an appendix to the 2004 *Closeout Report*. Information pertaining to the groundwater conditions at the site is available for review in the September 2004 documents for AOC 35 entitled the *Phase II EBS Field Report* and the *EBS Phase II Project Memorandum*.

Surface and subsurface soil samples were collected from the Pistol Range and the de-armament embankment. Given the site history, most sample analyses focused on either inorganic (metal) constituents or explosive-related compounds. Waste characterization samples from the embankment removal included a broader range of analyses. Three groundwater monitoring wells and one temporary well point are located onsite. Sample locations are shown in Figure 2-3. Sample results are summarized below and in Tables 2-1 and 2-2.

#### Phase I EBS

The Pistol Range was identified as an EBS RIA due to concerns that lead from spent ammunition rounds could be present in soil or groundwater. No samples were collected at this time.

#### Phase II EBS Work Plan

The Navy decided to conduct a TCRA under CERCLA for the Pistol Range site rather than conducting a Phase II EBS investigation. No samples were collected at AOC 35 as part of the Phase II EBS.

#### Time-Critical Removal Action

As summarized in Section II.B, no metal debris or UXO was found during site screening. Based on preliminary sampling prior to excavation, eight grid locations were found to contain lead concentrations in excess of the 300 mg/kg cleanup goal, with a maximum detection of 580 mg/kg of lead. Subsequent to the removal action, the maximum detected lead concentration was 270 mg/kg, which is below the cleanup goal. Results for other inorganic constituents (metals) detected in site soil were at acceptable levels in comparison with NAS South Weymouth basewide background levels and were below screening benchmarks (see Table 2-1).

#### Supplemental Sampling - 2002

Lead was detected in groundwater at a concentration of 2.4 micrograms per liter (ug/L) in the sample from MW10-302, which is the well located upgradient of the Pistol Range. This concentration does not exceed the EBS human health benchmark of 15 ug/L, which is equivalent to federal and state criteria.

As shown in Table 2-2, concentrations of other inorganic constituents in groundwater did not exceed EBS screening benchmarks for human health except for iron (2,200 J [estimated] ug/L) and manganese (1,400 ug/L); however, iron and manganese concentrations were within NAS South Weymouth background levels (i.e., the concentrations were below the 95% Upper

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Prediction Limit [UPL] of the NAS South Weymouth background dataset of 44,137.52 ug/L and 2,680.63 ug/L, respectively). The 95% UPL is a value that is expected to exceed the value of a future sample 95% of the time. In some cases, the 95% UPL is identical to the maximum value in the background dataset. Sometimes the 95% UPL is lower or higher than the maximum. By comparing the site data to the 95% UPL of the background dataset, one evaluates whether the site sampling data are consistent with background conditions.

#### De-armament Embankment Removal - 2003

From the pre-excavation sampling, no munitions compounds were detected. No UXO was found by the UXO screening during excavation of the de-armament embankment. As shown in Table 2-1, low concentrations of various inorganic constituents, SVOCs, pesticides, and TPH were detected in embankment soil samples (pre-removal/waste characterization). PCBs were non-detect. Lead was detected at a maximum concentration of 40 mg/kg. This embankment soil was removed from the site and was acceptable for use as daily cover at a licensed landfill.

Post-excavation confirmatory soil samples were collected within the footprint of the former de-armament embankment. As shown in Table 2-1, trace/low concentrations of the VOCs acetone and 2-butanone and several SVOCs were detected in the samples; however, the concentrations of those constituents did not exceed risk-based screening benchmarks, and no action was warranted. The presence of acetone and 2-butanone is likely attributable to the sampling and analysis procedures and not indicative of the actual site conditions. As shown in Appendix I of the *Closeout Report* (Tetra Tech FW 2004), the laboratory qualifiers indicated that acetone was also detected in blank samples. Acetone and 2-butanone are likely (common) laboratory contaminants and are not representative of site conditions.

Pesticides and PCBs were not detected in any of the post-excavation confirmatory samples from the de-armament embankment. No munitions compounds were detected in soil samples from the de-armament embankment.

The maximum post-removal concentration of lead in soil was 15.4 mg/kg. Three inorganic constituents (aluminum, chromium, iron) were detected in post-removal confirmatory samples at concentrations that exceeded an EBS benchmark and NAS South Weymouth background levels. Magnesium was also present at concentrations above basewide background levels; however, magnesium is considered to be an essential nutrient and there is no EBS benchmark for that constituent. Other inorganic elements were present at concentrations that did not exceed EBS benchmarks or background levels and, therefore, would not pose potential unacceptable risks to human health or the environment and were not evaluated further at AOC 35. Potential risks to human health and the environment are further evaluated for aluminum, chromium, iron, and magnesium:

- Aluminum—The concentration of aluminum in surface soil exceeds the corresponding 95% UPL of the basewide background data set and the EBS benchmark. However, the EBS human health benchmark used for aluminum is the EPA risk-based criteria (RBC) reduced by a factor of ten to account for any additive or synergistic effects of multiple

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contaminants. The actual EPA RBC for aluminum (78,000 mg/kg; published 1998) is greater than the maximum value seen at this site (13,000 mg/kg). Because aluminum is poorly absorbed and efficiently eliminated from the body (Bast 1993), conservatism based on additive or synergistic effects of multiple contaminants is not necessary. Aluminum, one of the most abundant metals in the earth's crust, is present at a maximum level at the site that is within the same order of magnitude as background and is not considered to be a concern for ecological risk. The concentrations of aluminum at the site were measured as total recoverable metal. However, chemical and toxicological information suggests that aluminum must be in a soluble form in order to be toxic to biota. There presently are no well-developed methods for measuring soluble aluminum (USEPA 2000).

- **Chromium**—The maximum reported concentration of chromium in surface soil (10.8 mg/kg) exceeds the ecological EBS benchmark (0.4 mg/kg) and slightly exceeds the 95% UPL (10.1 mg/kg) for surface soil. However, chromium is not considered a chemical of potential concern (COPC) in surface soil at AOC 35 because the slight exceedance of the basewide background level was reported in only 1 of 16 confirmatory samples. The other 15 samples (range: 3.6–8.1 mg/kg) did not exceed the applicable 95% UPL of the background dataset. One of these samples was non-detect with a reporting limit of 11 mg/kg.
- **Iron**—Iron is considered an essential nutrient in human health risk assessments; therefore, the slight exceedance of the basewide background surface soil value by the maximum detection of iron does not require further consideration at AOC 35.
- **Magnesium**—No EBS benchmarks are available for magnesium. Although the maximum concentration of magnesium exceeded the basewide background level, it is considered an essential nutrient. No further consideration of magnesium in surface soil at AOC 35 is required.

#### **Supplemental Sampling - 2004**

Groundwater data for AOC 35 are presented in Table 2-2. As shown, lead found in soil from past operations at the Pistol Range has not adversely affected groundwater quality. However, groundwater quality has been impacted by VOCs associated with the conditions at an upgradient site (IR Program Site 11 – Former AOC 108<sup>1</sup>).

In Winter 2004, the Navy sampled groundwater from MW10-303 and MW10-304, located immediately downgradient of the former embankment, which is the area most likely to be impacted by site use (e.g., by leaching of lead from surface soil). Lead was detected at a maximum concentration of 3 ug/L (MW10-304)<sup>2</sup>. No significant difference can be noted between lead concentrations in upgradient (MW10-302) and downgradient (MW-303, -304)

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<sup>1</sup> Formerly designated RIA 108 – Background Location BG-005.

<sup>2</sup> The detection limit reported for the sample from MW10-303 was 5 ug/L. Lead was not detected at this level.

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groundwater. These concentrations (i.e., the maximum detection and the highest detection limit) are below the federal Maximum Contaminant Level (MCL) for drinking water of 15 ug/L. Groundwater samples from AOC 35 wells were slightly turbid (144, 36, and 123 nephelometric turbidity units [NTUs] for MW10-302, -303, and -304, respectively). Turbid samples can result in total metals results that are biased high. Thus, there is no indication that the presence of lead in soil has impacted groundwater at AOC 35, consistent with its relative immobility in aqueous transport. Arsenic, antimony, iron, and manganese were detected at levels that exceed human health benchmark (screening) values at the site; however, iron and manganese are within the established Basewide background range, and arsenic and antimony are below MCLs. Redox conditions encountered at MW10-303 are reducing (oxidation reduction potential [ORP] 0 mV; dissolved oxygen [DO] 0.88 mg/L), and iron is correspondingly high (35,000 ug/L). Therefore, it is likely that the other trace metals at this location (including arsenic and antimony) are elevated due to dissolution of iron oxyhydroxides under reducing conditions and mobilization of sorbed species. Finally, given that the potential source for lead (i.e., Pistol Range soil) has been removed, there is no reason to be concerned for future impacts to groundwater.

No munitions compounds were detected in groundwater. As detailed in the *Field Report* (Stone & Webster 2004), 3-nitrotoluene was initially reported by the laboratory in one groundwater sample from MW10-303, but it was determined to be a “false positive” result subsequent to the data validation process. Navy and EPA chemists agreed that the false positive detection was due to interference from other constituents in the sample.

Tetrachloroethene (PCE) (a commonly-used solvent) was detected in groundwater samples from each of the three groundwater wells at concentrations of up to 270 ug/L in shallow groundwater and 1,600 ug/L in deep groundwater. Two PCE degradation by-products, trichloroethene (TCE) and *cis*-1,2-dichloroethene (DCE), were detected in samples from two of the wells at concentrations of up to 14 ug/L in shallow groundwater and 1.7 ug/L in deep groundwater. The presence of PCE, TCE, and DCE in groundwater at AOC 35 is not attributed to the past Pistol Range operations, but is instead a result of the migration of groundwater containing these VOCs from an upgradient site, IR Program Site 11 (Table 2-3). The Navy is working with EPA and MADEP to fully evaluate and address VOCs in groundwater from IR Program Site 11 separately from AOC 35.

In August 2004, the Navy also collected an additional groundwater sample from a new, temporary well (GW10-341) to confirm that groundwater downgradient of the soil removal areas addressed by the TCRA had not been impacted by lead. Dissolved lead was not detected (<5 ug/L) in the new groundwater sample or its duplicate sample; therefore, the results confirmed that lead from the removal action areas has not adversely impacted groundwater.

## **VI. CURRENT AND POTENTIAL FUTURE SITE RESOURCE USES**

Under current use of the former NAS South Weymouth, there are no regular activities occurring at AOC 35. Human activity is limited to possible brush clearing or grass cutting during summer months. NAS South Weymouth is operationally closed. The Navy generally controls access to

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the Base (and thereby the sites) via fencing, vehicle gates, and administrative staff present at the Base.

The anticipated future use of the AOC 35 property is based on the zoning prescribed in the *Zoning and Land Use By-Laws for the Naval Air Station South Weymouth* (NASPC 1998), which has been approved by the townships of Weymouth, Abington, and Rockland and is still in effect. The Pistol Range portion of AOC 35 is zoned as “open space.” The open space zoning is intended for the preservation of large, contiguous wetland areas and open space for parkland, active and passive recreation, reservations, community gardens, rivers and streams, and similar uses. The zoning may also encompass such interests as watershed and flood protection, preservation of wildlife habitat, and conservation of recreational land. No residential reuse is permitted under the open space zoning. The majority of the de-armament embankment area is also zoned as open space, although the southern portion extends into a “special use designation” zoned area. As outlined in the Reuse Plan of March 1998 and Exhibit E of the *Zoning and Land Use By-Laws* (NASPC 1998), the following uses that are in that zoning are: Medical, Recreational, Business, R&D, Commercial, Industrial, Transportation, Warehouse/Distribution, Communications and Utilities, and Public Infrastructure.

On 23 September 2004, the Master Developer for South Shore Tri-Town Development Corporation (SSTTDC - the designated recipient of the property to be transferred in accordance with BRAC) presented a Conceptual Plan that would require changes to the current zoning and reuse plans for the NAS South Weymouth property. Under this alternative reuse plan, the AOC 35 site property is zoned as “open space/public benefit conveyance/wetlands/habitat restoration.” The existing reuse plan remains in effect for any property transferred to the SSTTDC until an amended reuse plan is voted on and approved by the participating communities.

Groundwater at AOC 35 is not within a state-mapped, potentially productive aquifer zone. Therefore, groundwater at AOC 35 is not considered to be part of a Potential Drinking Water Source Area. Potential reuse of the property, however, may be constrained by groundwater restrictions that will likely be required due to migration of VOC contaminants from the upgradient IR Program Site 11.

## **VII. SUMMARY OF POTENTIAL SITE RISKS**

The Pistol Range was originally identified in the Phase I EBS Report as RIA 35, an area requiring further evaluation due to the potential for contamination, primarily lead from spent ammunition.

The Navy elected to conduct a removal action at the Pistol Range due to the high probability that it would need to remediate soil because of lead, based on its experience at other pistol ranges throughout the country. The Navy collected data from 104 areas using a 20-ft by 20-ft grid pattern established from the shooters stand to the north (backstop) side of the embankment. Based on the sampling results, the Navy removed 133.23 tons of soil from 8 out of 104 areas. Final post-removal action concentrations for lead in soil were all below the cleanup goal of

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300 mg/kg and EPA's risk-based screening criterion of 400 mg/kg for residential exposure. Post-removal confirmatory sample results for other constituents were compared to the conservative risk-based EBS screening benchmarks and the basewide background screening values established for NAS South Weymouth. Other inorganic constituents (metals) detected in site soil were generally at concentrations below screening benchmarks and were at acceptable levels in comparison to basewide background levels.

Soil conditions at the Pistol Range are acceptable for unrestricted use (including residential), based on comparisons of chemical constituents in soil to risk-based federal screening criteria and state standards. Upon future transfer of the AOC 35 property in accordance with the current reuse plan, as well as the proposed modifications to the reuse plan, the area would be zoned for open space and, therefore, would also be available for some recreational use. No additional measures are required for AOC 35 soil to ensure protection of human health and the environment.

In groundwater, lead, the contaminant of concern at the Pistol Range, was detected in slightly turbid samples at a maximum of 3 ug/L, which is well below the federal MCL of 15 ug/L. Antimony and arsenic concentrations exceeded background values and risk-based screening benchmarks for human health. The concentrations of antimony and arsenic are, however, below conservative federal and state standards for groundwater (i.e., federal MCLs for drinking water and MCP Method 1 "GW-1" criteria for groundwater).

PCE and its degradation by-products also were detected in groundwater at AOC 35 as a result of their migration from an upgradient site, Site 11 – Former AOC 108. The Navy is working with EPA and MADEP to evaluate potential risks associated with VOCs in groundwater emanating from Site 11 separately from AOC 35. Any measures, including but not limited to land use restrictions, that may be required to minimize risks posed by groundwater contamination attributable to Site 11 will be addressed in the response action for Site 11. No additional measures are required for AOC 35.

#### **VIII. DOCUMENTATION OF NO SIGNIFICANT CHANGES**

The Navy issued a Proposed Plan for No Further Action for AOC 35 on 20 September 2004 for a 30-day public comment period. A public information session and a public hearing were held on 14 October 2004. The Navy reviewed the comments submitted during the public comment period (Appendix E). As summarized in the Responsiveness Summary (Part 3), it was determined that no significant changes to the decision, as originally identified in the Proposed Plan, were necessary. Therefore, No Further Action for AOC 35 will be implemented.

#### **IX. STATE ROLE**

MADEP concurs with the Navy's and EPA's No Further Action decision for AOC 35 at NAS South Weymouth (see Appendix A).

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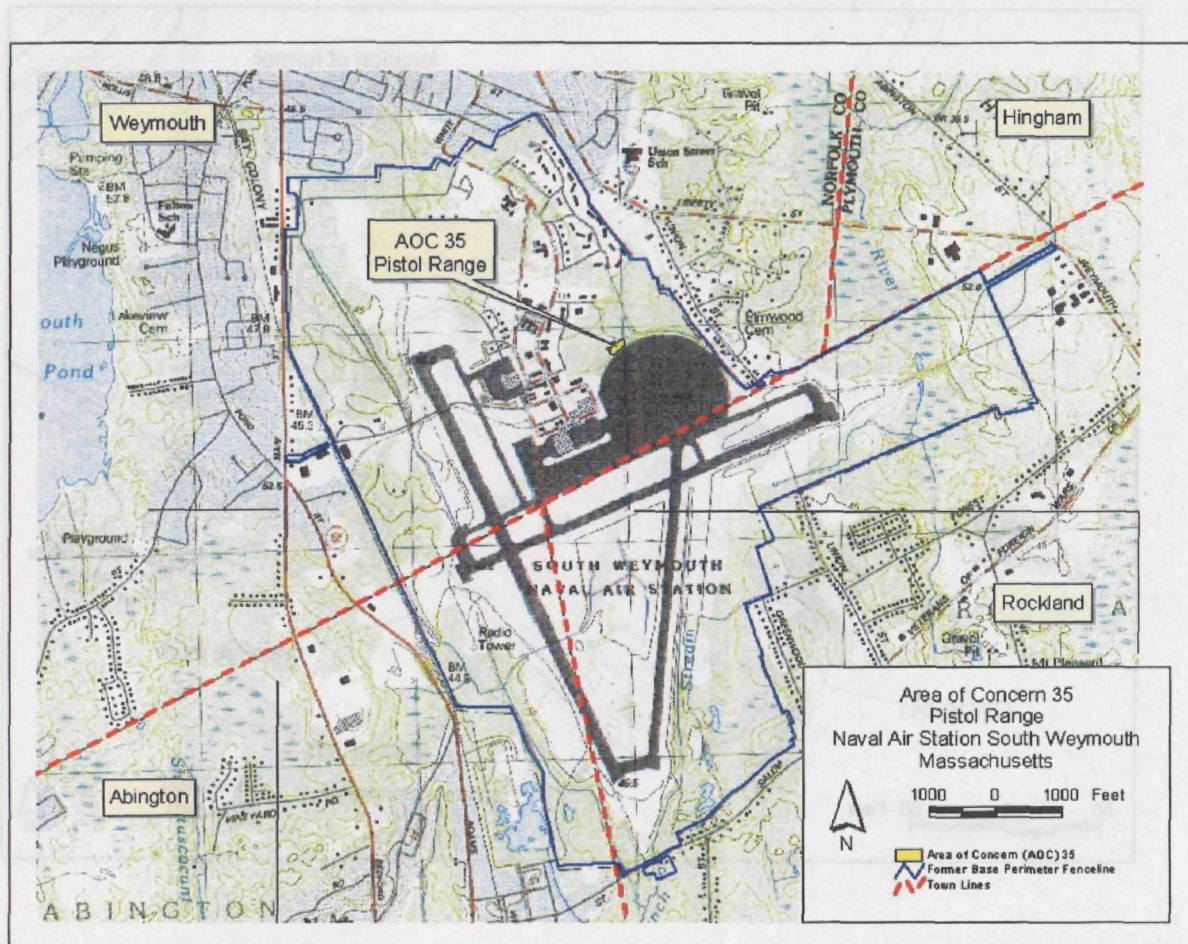


Figure 2-1: Site location map.

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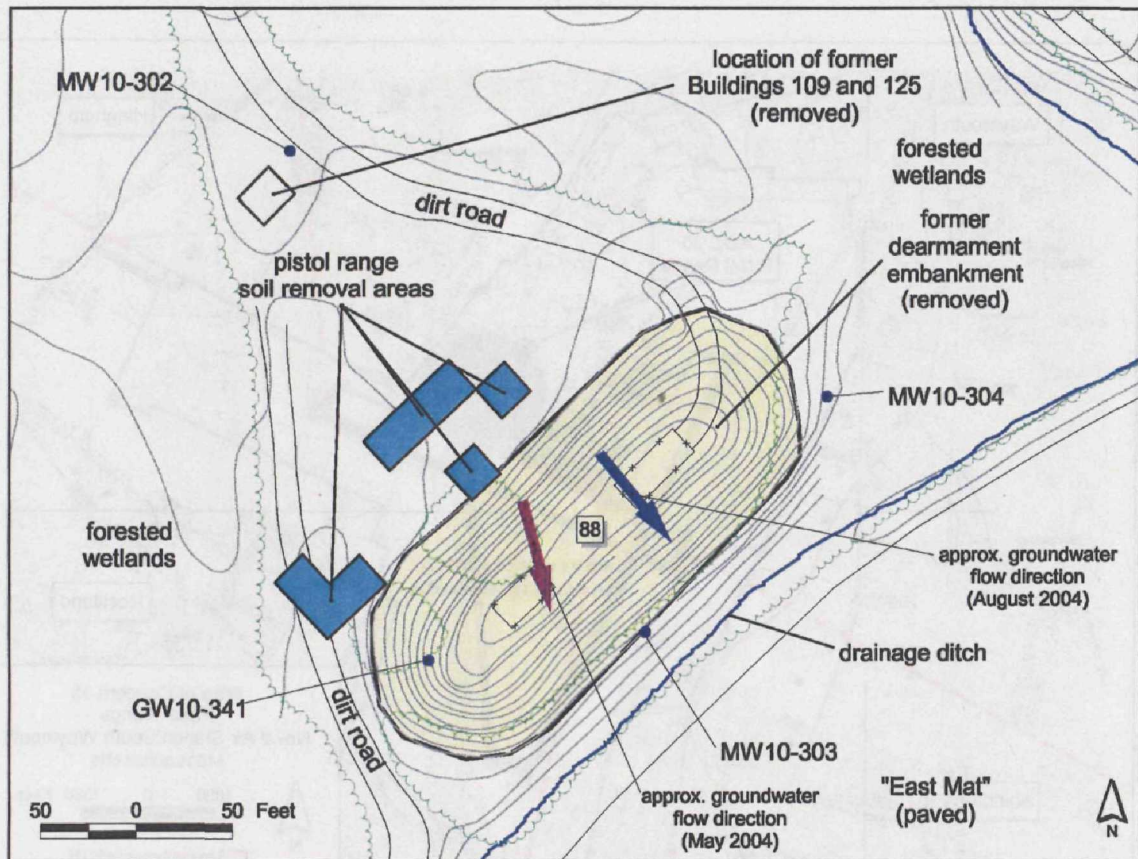


Figure 2-2: AOC 35 Site Map.

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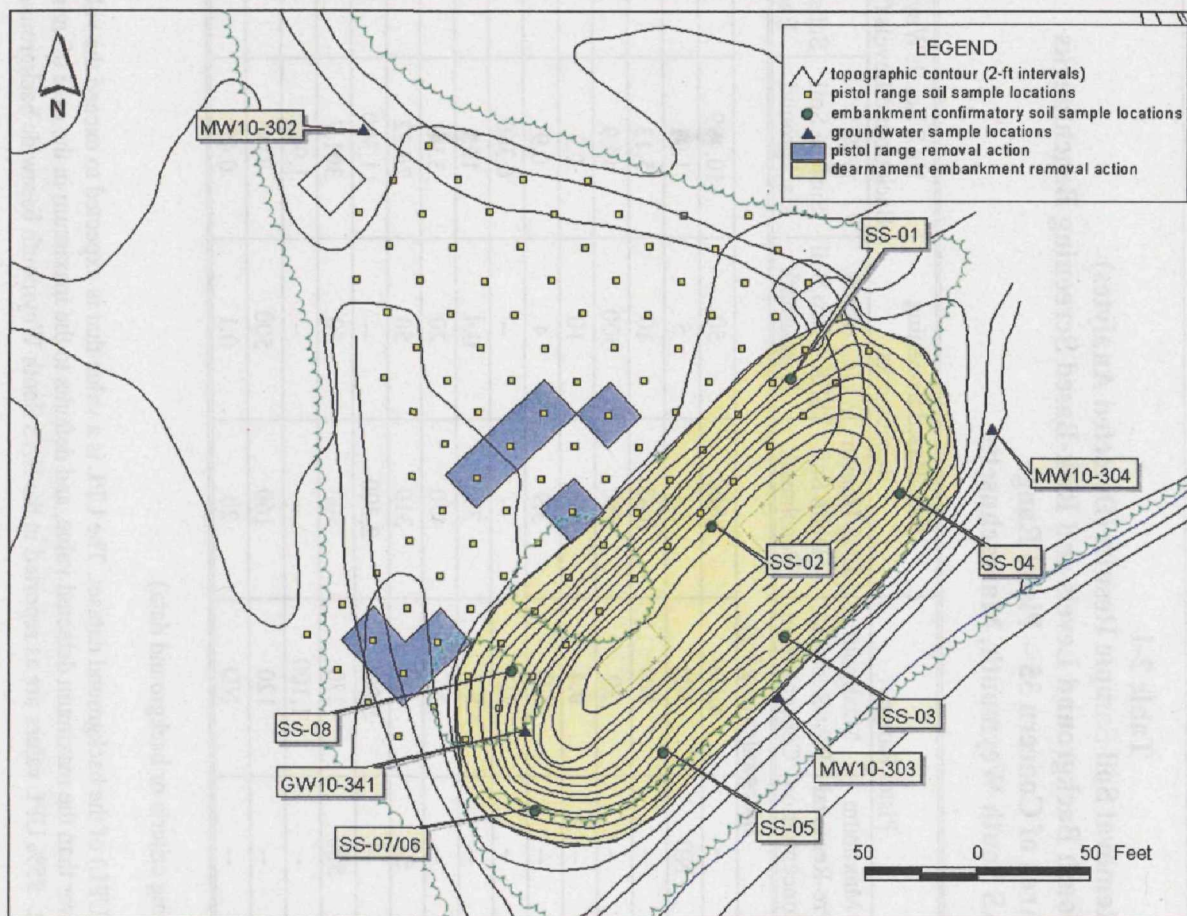


Figure 2-3: AOC 35 Sample Location Map.

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**Table 2-1**  
**Pre- and Post-Removal Soil Sample Results (Detected Analytes)**  
**Compared to NAS South Weymouth Background Levels and Risk-Based Screening Benchmarks**  
**Area of Concern 35 – Pistol Range**  
**NAS South Weymouth, Massachusetts**

Analyte	De-armament Embankment		Pistol Range		Risk-Based Screening Benchmarks		NAS South Weymouth Background Levels (95% UPL)	
	Maximum Pre-Removal Concentration	Maximum Post-Removal Concentration	Maximum Pre-Removal Concentration	Maximum Post-Removal Concentration	EBS Human Health Soil Benchmark	SERA Eco Soil Benchmark	Surface Soil Background	Subsurface Soil Background
<b>Inorganics (mg/kg)</b>								
Aluminum	--	<b>13,000</b>	--	6,100	7,800	50	10,499	8,519
Antimony	--	1.2	ND	ND	3.1	5	1.91	3.65
Arsenic	2.1	1.1	--	ND	0.43	10	5.13	1.89
Barium	33	28.7	--	39	550	500	49.9	27.03
Beryllium	--	0.29	--	<b>0.4</b>	0.7	10	0.3	0.44
Cadmium	0.065	ND	--	ND	3.9	4	0.9	0.115
Calcium	--	1,060	--	910	--	--	6,360	1,547
Chromium	<b>21</b>	<b>10.8</b>	--	8.1	39	0.4	10.1	10.15
Cobalt	--	<b>5.5</b>	--	ND	470	20	3.98	4.74
Copper	--	9.5	<b>54</b>	<b>33</b>	310	50	26.22	14.2
Iron	--	<b>11,400</b>	--	8,800	2,300	--	11,300	11,449
Lead	40	15.4	<b>580</b>	270	300	50	301.7	9.27
Magnesium	--	<b>2,810</b>	--	1,100	--	--	1,963	2,246
Manganese	--	171	--	120	160	500	314	414
Mercury	0.083	0.05	--	ND	20	0.1	0.49	0.11

NOTE: **Bold** = Sample result exceeds background level.

-- = Not sampled (data) or not available (screening criteria or background data).

ND = Non-detect.

Cited background levels are the 95% Upper Prediction Limit (UPL) of the background dataset. The UPL is a value that is expected to exceed the value of a future sample 95% of the time. The UPL may be higher or lower than the maximum detected value, and defaults to the maximum in the case of non-parametric data or if more than half the samples are non-detect. 95% UPL values are as reported in the NAS South Weymouth basewide background dataset, as amended in November 2002.

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Analyte	De-armament Embankment		Pistol Range		Risk-Based Screening Benchmarks		NAS South Weymouth Background Levels (95% UPL)	
	Maximum Pre-Removal Concentration	Maximum Post-Removal Concentration	Maximum Pre-Removal Concentration	Maximum Post-Removal Concentration	EBS Human Health Soil Benchmark	SERA Eco Soil Benchmark	Surface Soil Background	Subsurface Soil Background
<b>Inorganics (mg/kg) (cont'd)</b>								
Nickel	--	6.8	--	4.5	160	30	17.2	6.5
Potassium	--	317	--	380	--	--	631	457
Selenium	0.66	0.98	--	ND	390	1	3	0.41
Silver	0.45	0.61	--	ND	39	2	ND	0.28
Sodium	--	79.7	--	ND	--	--	272	144
Thallium	--	1.3	--	ND	0.55	1	1.8	0.22
Vanadium	--	28.7	--	15	55	2	89.1	17.08
Zinc	--	21.8	170	28	2,300	50	73.8	28.74
<b>Volatile Organic Compounds (ug/kg)</b>								
Acetone	ND	170 B	--	--	3,000	--	2200	59.75
2-Butanone	ND	45	--	--	4700,000	--	100	9.5
<b>Semi-Volatile Organic Compounds (ug/kg)</b>								
Acenaphthylene	ND	1.7 J	--	--	100,000	20,000	210	ND
Anthracene	ND	13	--	--	1,000,000	20,000	170	ND
Benzo(a)anthracene	ND	22	--	--	700	--	810	600
Benzo(a)pyrene	ND	18	--	--	87	--	1,829	16
Benzo(b)fluoranthene	ND	25	--	--	700	--	770	810
Benzo(g,h,i)perylene	ND	9.2	--	--	1,000,000	--	310	330
Benzo(k)fluoranthene	ND	9	--	--	7000	--	2,700	320
Benzoic Acid	680	--	--	--	--	--	--	--
bis(2-ethylhexyl)phthalate	ND	69 J	--	--	46,000	200,000	46,000	205
Chrysene	ND	17	--	--	7,000	--	1,400	710
Dibenzo(a,h)anthracene	ND	1.3	--	--	87	--	96	1.7
Fluoranthene	59 J	57 J	--	--	310,000	--	2,400	1,100
Fluorene	ND	4.1	--	--	310,000	20,000	ND	ND
Indeno(1,2,3-cd)pyrene	ND	9	--	--	700	--	175	390
NOTE: J = Estimated.								

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Analyte	De-armament Embankment		Pistol Range		Risk-Based Screening Benchmarks		NAS South Weymouth Background Levels (95% UPL)	
	Maximum Pre-Removal Concentration	Maximum Post-Removal Concentration	Maximum Pre-Removal Concentration	Maximum Post-Removal Concentration	EBS Human Health Soil Benchmark	SERA Eco Soil Benchmark	Surface Soil Background	Subsurface Soil Background
<b>Semi-Volatile Organic Compounds (ug/kg) (cont'd)</b>								
Naphthalene	42 J	--	--	--	4,000	20,000	ND	ND
Phenanthrene	ND	46 J	--	--	100,000	20,000	1,500	360
Pyrene	62 J	54 J	--	--	230,000	--	1,500	1,000
<b>Pesticides (ug/kg)</b>								
4,4'-DDE	4.0	--	--	--	1,900	12,000	320	1.9
4,4'-DDD	5.4	--	--	--	2000	12,000	6.6	4.2
4,4'-DDT	3.0	--	--	--	1,900	12,000	325.3	4.6
<b>TPH (mg/kg)</b>								
Diesel-range organics	87	--	--	--	500	--	--	--

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**Table 2-2**  
**Groundwater Sample Results (Detected Analytes)**  
**Compared to NAS South Weymouth Background Levels and Risk-Based Benchmarks**  
**Area of Concern 35 – Pistol Range**  
**NAS South Weymouth, Massachusetts**

Analyte	Maximum Detected Concentration	EBS Human Health Benchmark	Background Level <sup>(c)</sup>	Federal MCL	MCP GW-1
<b>Volatile Organic Compounds (ug/L)</b>					
cis-1,2-Dichloroethene (DCE)	1.7	--	--	70	70
Tetrachloroethene (PCE)	1,600	1.1	--	5	5
Trichloroethene (TCE)	14	1.6	0.73	5	5
<b>Munitions Compounds (ug/L)</b>					
3-Nitrotoluene	3 J <sup>(a)</sup>	--	--	--	--
<b>Inorganics (ug/L)</b>					
Aluminum	2,900	3,700	15,341.35	--	--
Antimony	3.2 J	1.5	--	6	6
Arsenic	4.5	0.045	--	50 <sup>(b)</sup>	50
Beryllium	0.2 J	4	0.77	4	4
Chromium	5.8	18	18.1	100	100
Cobalt	14	220	8.5	--	--
Iron	35,000	1,100	44,137.52	--	--
Lead	3	15	--	15	15
Manganese	2,200	73	2,680.63	--	--
Mercury	0.11	1	--	2	2
Nickel	13	73	--	--	100
Silver	1.3 J	7	--	--	40
Vanadium	6.6	26	22.6	--	50
Zinc	14	900	51.7	--	2,000
<p>(a) Determined to be a "false positive" result.</p> <p>(b) 10 ug/L, as of 23 January 2006.</p> <p>(c) Cited background levels are the 95% Upper Prediction Limit (UPL) of the background dataset. The 95% UPL is a value that is expected to exceed the value of a future sample 95% of the time.</p> <p>NOTE: <b>Bold</b> = Exceeds background.</p> <p>-- = Not available.</p>					

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**Table 2-3  
Summary of Operable Units and Areas of Concern  
NAS South Weymouth, Massachusetts**

Site	Site Designation	Operable Unit Designation	Site Abbreviation	Site Description	Regulatory Status as of October 2004
West Gate Landfill	IR Program Site 1	1	WGL	Disposal area used for a variety of construction and demolition debris, municipal, and other waste materials.	PA, SI, RI, and FS completed. Preparing PRAP.
Rubble Disposal Area (Upland)	IR Program Site 2	2	RDA	Disposal area used for primarily building demolition debris.	PA, SI, RI, FS, PRAP, ROD, and Remedial Design completed. Implementing Remedial Action (PCB removal and landfill cap).
Small Landfill	IR Program Site 3	3	SL	Disposal area used primarily for concrete, metal, and wood.	PA, SI, RI, PRAP, and ROD (No Action with groundwater monitoring) completed. Monitoring program completed.
Fire Fighting Training Area	IR Program Site 4	4	FFTA	Area designated for dispensing fuels for igniting and extinguishing fires.	PA, SI, and RI completed. No FS required. Completed PRAP and ROD. Further assessment to be conducted in accordance with the MCP, 310 CMR 40.0000.
Tile Leach Field	IR Program Site 5	5	TLF	Sand bed used to receive and distribute treated industrial wastewater.	PA, SI, and RI completed. No FS required. Preparing PRAP.
Fuel Farm	IR Program Site 6	Not applicable (no longer CERCLA)	None	Tank farm and fuel dispensing area.	Site transferred into the MCP program based on exhibiting only fuel-related issues.
Sewage Treatment Plant	IR Program Site 7	7	STP	Wastewater treatment plant used primarily for domestic wastewater.	PA, SI, and RI completed. Preparing FS.
<p>NOTE: PA = Preliminary Assessment.  SI = Site Inspection.  RI = Remedial Investigation (Phase I and II).  FS = Feasibility Study.  PRAP = Proposed Remedial Action Plan.  CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act.  ROD = Record of Decision.  MCP = Massachusetts Contingency Plan.  OU = Operable Unit.</p> <p>AOC = Area of Concern.  CMR = Code of Massachusetts Regulations.  TACAN = Tactical Air Navigation.</p>					

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Site	Site Designation	Operable Unit Designation	Site Abbreviation	Site Description	Regulatory Status as of October 2004
Abandoned Bladder Tank Fuel Storage Area	IR Program Site 8	8	ABTFSA	Area in which aboveground tanks temporarily were stored in support of aircraft refueling training operations.	Closed. PA, SI, and RI completed. No FS necessary. Completed No Action PRAP and ROD.
Rubble Disposal Area	IR Program Site 2	9	RDA	Steep sloping area adjacent to the RDA.	Combined with OU-2. No separate actions being performed.
Building 81	IR Program Site 9	10	None	Release of solvents from former motor pool.	Former MCP site moved to CERCLA program. Conducted <i>in situ</i> chemical oxidation pilot study for groundwater. Ongoing Work Plan development for RI.
Building 82	IR Program Site 10	11	None	Release of solvents from former aircraft hangar operations.	Former MCP site moved to CERCLA program. Ongoing Work Plan development for RI.
Former Area of Concern (AOC) 108	IR Program Site 11	12	AOC 108	Release of solvents to groundwater.	Former CERCLA Area of Concern recently moved to the IR Program. Ongoing geophysical survey and source delineation prior to development of the RI Work Plan.
Hangar 1 Main Bay	AOC Hangar 1	None	None	Main building floor drains	Various Removal Action/Time Critical Removal Action (TCRA) completed. Working on comment resolution.
TACAN Area	AOC 3	None	None	Pile of rubble, soil, and metal debris containing PAHs and polychlorinated biphenyls (PCBs).	Conducted EBS Phase I and EBS Phase II. CERCLA removal action completed in Fall 2001 for the removal of 51 tons of soil and debris. Pending PRAP/ROD.
ATC abandoned septic system	AOC 4A	None	None	Alleged liquid and solid waste disposal; abandoned septic system. Arsenic in forested wetland hydric soil was detected at levels above background and its occurrence was further evaluated.	Ongoing sampling and risk assessment.
Wyoming St. Area (Former Transmitter Building)	AOC 8	None	None	Remnants of Building 70 demolition. Building housed radar electronics. Elevated PCB concentrations in soil.	Phase I, EBS Phase II. Navy is currently conducting a TCRA. PCB-contaminated soil is being disposed as hazardous waste under TSCA. Pending completion of the TCRA PRAP/ROD.
Supply Warehouse	AOC 13	None	None	Former railroad loading and unloading area. Polycyclic aromatic hydrocarbons (PAHs) and pesticides in soil.  Associated with RIA 88.	EBS Phase I, EBS Phase II. Conducted HHRA on soil. Removal action completed in September 2001 (8 tons of soil containing PAHs removed). Pending PRAP/ROD.
Water Tower Former Drum Storage Area	AOC 14	None	None	Staining between Hortensphere and Water Tower. Former drum storage area. Chromium, lead, and PAHs in soil.	EBS Phase I, Phase II. Conducted HHRA. Pending PRAP/ROD.

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Site	Site Designation	Operable Unit Designation	Site Abbreviation	Site Description	Regulatory Status as of October 2004
Water Tower Possible Lead in Soil	AOC 15	None	None	Possible lead paint in soil (paint chips from sandblasting of tower).	EBS Phase I, EBS Phase II. TCRA completed in June 2000 addressed lead in soil (280 tons of soil removed). Additional removal completed in March 2002 (104 tons of soil) to address elevated lead reported from adjacent AOC 14 sample. Pending resolution of regulatory concerns regarding groundwater. Pending PRAP/ROD.
Pistol Range (Training Material Storage Building Area)	AOC 35	None	None	Small arms ammunition rounds at historic Pistol Range.	EBS Phase I, EBS Phase II. Completed TCRA for lead in Pistol Range soil. Removed the de-armament embankment. Completed No Further Action PRAP. Ongoing ROD preparation.
Former Radio Transmitter Building Area	AOC 53	None	None	Alleged disposal area. Mainly PAHs and some inorganic constituents detected in sediment.	EBS Phase I, EBS Phase II. Ongoing TCRA. Pending PRAP/ROD.
Area North of Trotter Road - Antennae Field	AOC 55A	None	None	Seven antenna poles and the associated copper cables.	Phase I EBS, Phase II EBS. Removal action in September 2002 removed the antenna poles, platforms, grounding wires, and adjacent soil (840 tons of soil) and to lower ecological risk. Close-out Action Memorandum issued March 2003. No Further Action PRAP issued August 2003. Site closed with No Further Action ROD.
Area North of Trotter Road - Debris Area	AOC 55B	None	None	Solid waste disposal over a large, heavily wooded area.	Phase I EBS, Phase II EBS. Debris removal in 1999. No Action PRAP issued August 2003. Site closed with No Action ROD.
Area North of Trotter Road - Pond Area	AOC 55C	None	None	Metallic debris in heavily wooded area and pond. Metals in soil and sediment.	Phase II EBS. Ongoing investigation. Potential removal action. Pending PRAP/ROD.
Area North of Trotter Road - Wetland Area	AOC 55D	None	None	Metals, PCBs exceed ecological benchmarks in surface water and sediment.	Formerly part of AOC 55B. Ongoing investigation of ecological risks. Pending PRAP/ROD.
East Mat Drainage Ditch	AOC 60	None	None	Discolored water and solid waste identified in drainage ditch.	Phase I EBS, Phase II EBS. Removal action conducted in December 2002 on the western portion of ditch as part of the AOC 61 removal action. Ongoing additional sampling and ecological risk assessment. Pending PRAP/ROD.

**Record of Decision  
Naval Air Station South Weymouth  
Part 2 – Decision Summary**

Site	Site Designation	Operable Unit Designation	Site Abbreviation	Site Description	Regulatory Status as of October 2004
TACAN Ditch	AOC 61	None	None	Discolored water in drainage ditch.	EBS Phase I, EBS Phase II. Ongoing Removal Action (started Fall 2002) to address the TACAN Outfall drainage system and also associated ditches, drainage swales, storm sewer lines, and catch basins in other areas at the Base. Completed cleaning of the 60-in. storm drain lines and removal of sediment in the TACAN ditch (started Fall 03). Ongoing reporting. Pending PRAP/ROD.
Hazardous Waste Storage Area	AOC 83	None	None	RCRA Closure. PCB in subsurface soil.	EBS Phase I, EBS Phase II. Completed streamlined human health risk assessment. Pending PRAP/ROD.
East Street Gate Area	AOC 100	None	None	Debris disposal area. Various inorganics detected in surface soil at concentrations above background and ecological benchmarks.	EBS Phase I, EBS Phase II. Removal action completed in Fall 2001 (1,194 tons of soil and debris). Pending PRAP/ROD.

**Record of Decision  
Naval Air Station South Weymouth  
Part 3—Responsiveness Summary**

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**PART 3—RESPONSIVENESS SUMMARY**

**I. STAKEHOLDER ISSUES AND NAVY RESPONSES**

Verbal comments were received from one person during the public hearing held on 14 October 2004 for the AOC 35 Proposed Plan. A copy of the transcript for the public hearing is provided as Appendix E of this ROD. No written comments were received during the public comment period held from 20 September 2004 until 20 October 2004. Comment responses are provided in Sections II and III of this Responsiveness Summary.

**II. TECHNICAL AND LEGAL ISSUES**

The official comments received during the public comment period pertained to the coordination of the AOC 35 decision with the IR Program Site 11 (Former AOC 108) investigation. The Navy and EPA believe that these questions have been addressed herein and that there is sufficient technical basis to proceed with the No Further Action decision for AOC 35. By proceeding with the ROD, the Navy has completed all required CERCLA investigations and actions at AOC 35.

**III. COMMENT RESPONSES**

Note that the following comment is paraphrased. Refer to the transcript (Appendix E) for the complete version of the comment recorded during the public hearing held on 14 October 2004.

***Comment from Ken Hayes, Restoration Advisory Board Member from Weymouth***—Mr. Hayes requested clarification on the linkage between the investigations of IR Program Site 11 (Former AOC 108) and the No Further Action decision for AOC 35.

***Response***—Volatile organic compounds (VOCs) detected in ground water wells at AOC 35 have been attributed to Site 11, which is located north of and hydrologically upgradient of the Pistol Range. The chlorinated solvent tetrachloroethylene (PCE) and its degradation by-products trichloroethylene (TCE) and *cis*-1,2-dichloroethylene (DCE) are present at higher concentrations at Site 11 and have migrated via natural groundwater flow from Site 11 to the AOC 35 area. AOC 35 is clearly not the source of this VOC contamination since chlorinated solvents were not detected in soil at the Pistol Range, and they have been detected in soil and groundwater at Site 11. The Navy is committed to completing a remedial investigation and will implement a remedy to address this contamination through the CERCLA process. The Navy is investigating the presumed source area at Site 11 in the Fall of 2004 and will use that information to develop the Remedial Investigation Work Plan for further site characterization in Spring 2005.

The identified contaminant of concern at AOC 35, the Pistol Range, was lead in soil. The Navy successfully removed that impacted soil as a Time Critical Removal Action in 1999/2000. In 2003, the Navy also removed the soil of the de-armament embankment as a precautionary measure to ensure that no UXO or munitions compounds were present at AOC 35. The

**Record of Decision**  
**Naval Air Station South Weymouth**  
**Part 3—Responsiveness Summary**

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investigations demonstrated that Navy activities at the Pistol Range itself have not adversely affected groundwater quality. The Navy has documented, therefore, that all necessary remedial actions have been taken at AOC 35, and that No Further Action is required for the Pistol Range in order to protect human health and the environment. This ROD asserts this finding and closes AOC 35 under CERCLA, but it does not close Site 11.

The no further action ROD for AOC 35 does not make a judgment on the suitability of the land for transfer. In considering transfer of this land, for example, it would be noted that there was no impact on the environmental condition of the property from the former AOC 35 because it had already been cleaned up to allow for unrestricted use with respect to site soil and a ROD had been signed. However, groundwater contamination from Site 11 would affect its suitability to transfer unless a remedy were in place or a land use restriction were established and maintained to ensure protection of human health and the environment. The land at AOC 35 will now become part of the Site 11 investigation area, and additional monitoring wells may need to be installed as the investigation proceeds. The Navy will continue to update the RAB on the status of the Site 11 investigation.

**Record of Decision  
Naval Air Station South Weymouth, Massachusetts  
Appendix A: Massachusetts Department of Environmental Protection  
Letter of Concurrence**

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**APPENDIX A: MASSACHUSETTS DEPARTMENT OF  
ENVIRONMENTAL PROTECTION LETTER OF CONCURRENCE**

Refer to attached copy.



COMMONWEALTH OF MASSACHUSETTS  
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
ONE WINTER STREET, BOSTON, MA 02108 617-292-5500

MITT ROMNEY  
Governor

KERRY HEALEY  
Lieutenant Governor

ELLEN ROY HERZFELDER  
Secretary

ROBERT W. GOLLEDGE, Jr.  
Commissioner

Ms. Susan Studlien  
Director, Site Remediation and Restoration  
U.S. Environmental Protection Agency  
1 Congress Street, Suite 1100  
Boston, MA 02114-2023

Re: Record of Decision  
Area of Concern 35 (Pistol Range)  
Former South Weymouth NAS  
RTN 3-2621  
January 13, 2005

Dear Ms. Studlien:

The Department of Environmental Protection has reviewed the *Record of Decision for Area of Concern 35, Pistol Range, Naval Air Station South Weymouth*, received December 20, 2004. The Record of Decision (ROD) summarizes the results from the associated site assessments and removal actions, and provides the Navy's rationale for selecting a No Further Action decision for AOC 35. In addition, the ROD provides assurances that contaminated groundwater underlying AOC 35 will be addressed as part of the on-going AOC 108 response actions. Based on the results from the AOC 35 site investigations and removal actions, which indicate that current conditions in AOC 35 do not pose a significant risk to human health or the environment, and the assurances provided regarding AOC 108, the Department offers concurrence with the AOC 35 ROD.

If you have any questions or comments, please contact David Chaffin, Project Manager (617 348-4005), or Anne Malewicz, Federal Facilities Section Chief (617 292-5659).

Very truly yours,

Richard Chalpin  
Acting Assistant Commissioner  
Bureau of Waste Site Cleanup

**Record of Decision**  
**Naval Air Station South Weymouth, Massachusetts**  
**Appendix B: References**

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**APPENDIX B: REFERENCES**

- EA Engineering, Science, and Technology (EA). 2003. *Site Management Plan, Revision 4.0 (Draft), Naval Air Station South Weymouth, Massachusetts*. 2003. Note: A revised draft IR Program Site schedule is available from September 2004.
- EA. 2004. *Proposed Plan, Area of Concern 35 (Pistol Range), Naval Air Station South Weymouth, Massachusetts*. September.
- Foster Wheeler Environmental Corporation (FWENC). 2000. *Time-Critical Removal Action Memorandum for Review Item 15: Water Tower; and Review Item 35: Pistol Range*. June.
- FWENC. 2000. *Draft Cleanup Activity Report for the Time Critical Removal Action, Review Item 35: Pistol Range Lead Soil Removal*. 23 June.
- Naval Air Station Planning Committee (NASPC). 1998. *Zoning and Land Use By-Laws for the Naval Air Station South Weymouth*. 24 March.
- Stone & Webster Environmental Technology & Services (Stone & Webster). 1996. *Final Report, Phase I Environmental Baseline Survey, Naval Air Station, South Weymouth, Massachusetts*. 18 November.
- Stone & Webster. 1998. *Final Phase II Environmental Baseline Survey Sampling Work Plan*. 13 October.
- Stone & Webster. 2004. *Revised Phase II EBS Field Report Area of Concern 35 – Pistol Range/De-arming Embankment*. September.
- Stone & Webster. 2004. *EBS Phase II South Weymouth Naval Air Station – Revised Project Memorandum re: AOC 35 – Pistol Range/De-armament Embankment, Groundwater Screening*. September.
- Tetra Tech FW, Inc. 2004. *Final Closeout Report for Pistol Range and Dearmament Embankment Removal, former Naval Air Station, South Weymouth, MA*. 30 March.
- Towns of Abington and Rockland and the City of Weymouth. 1998. *South Weymouth NAS Reuse Plan and South Shore Tri-Town Development Corporation Enabling Legislation*, as approved by towns in March 1998 and as enabled by the Governor on 14 August 1998.
- U.S. EPA. 1999. *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and other Remedy Selection Decision Documents*. Office of Solid Waste and Emergency Response. EPA/540/R-98/031. OSWER 9200.1-23P. PB98-963241. July.

**Record of Decision**  
**Naval Air Station South Weymouth, Massachusetts**  
**Appendix B: References**

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U.S. EPA. 2000. Ecological Soil Screening Level Guidance – Draft. Exhibit 5-2, Review of Aluminum Chemistry and Toxicity in Soil. 10 July.

**Record of Decision**  
**Naval Air Station South Weymouth, Massachusetts**  
**Appendix C: Glossary**

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**APPENDIX C: GLOSSARY**

**Action Memorandum**—A document authorizing and outlining the cleanup plan that will be followed as part of a short-term cleanup under CERCLA.

**Area of Concern (AOC)**—An area currently being investigated under CERCLA. These sites require either removal actions or risk assessments to identify the potential current and future effects on human health and the environment.

**Background Level**—Chemicals or concentrations of chemicals present in the environment due to naturally occurring geochemical processes and sources, or to human activities not related to specific point sources or site releases.

**Benchmark**—Concentration of a chemical considered to be protective of human health or the environment.

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)**—A federal law passed in 1980 and amended in 1986 by the Superfund Amendments and Reauthorization Act. The Act created a special tax that goes into a Trust Fund, commonly known as Superfund, to investigate and clean up abandoned or uncontrolled hazardous waste sites. Navy compliance with CERCLA/Superfund Amendments and Reauthorization Act (see Installation Restoration Program definition) is funded by the Department of Defense under the Defense Environmental Restoration Act.

**Chemical of Potential Concern (COPC)**—A compound or element identified as a possible source of risk, based upon a comparison between the chemical concentration and established screening levels.

**Environmental Baseline Survey (EBS)**—An environmental assessment conducted by the Navy at Bases that have been closed under the Base Realignment and Closure (BRAC) Act.

**Groundwater**—Water found beneath the Earth's surface in soil pore spaces and fractures in geologic formations. When formations yield water in sufficient quantity and quality (i.e., an aquifer), groundwater is often used as a water supply.

**National Priorities List (NPL)**—U.S. Environmental Protection Agency's list of sites for priority cleanup under the Superfund program.

**No Action/No Further Action**—Under CERCLA, if there are no unacceptable risks to human health or the environment at a site, then "no action" is required (i.e., no remediation, monitoring, or land use restrictions, etc.). If remediation is conducted in order to achieve the condition of no unacceptable risk, then the site requires "no further action" under CERCLA.

**Record of Decision**  
**Naval Air Station South Weymouth, Massachusetts**  
**Appendix C: Glossary**

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**Proposed Plan**—A CERCLA document that summarizes the lead agency's (in this case, the Navy's) preferred cleanup remedy for a site and provides the public with information on how they can participate in the remedy selection process.

**Record of Decision (ROD)**—A legal, technical, and public document under CERCLA that explains the rationale and final cleanup decision for a site. It contains a summary of the public's involvement in the cleanup decision.

**Responsiveness Summary**—A CERCLA document containing the responses to the formal comments submitted by the public regarding the Proposed Plan. This summary is issued as an appendix to the ROD.

**Review Item Areas (RIAs)**—Sites identified during a Phase I EBS that require further study for potential contamination.

**Record of Decision**  
**Naval Air Station South Weymouth, Massachusetts**  
**Appendix D: Administrative Record Index**

**APPENDIX D: ADMINISTRATIVE RECORD INDEX**

File No.	Vol.	Document No.	Document Type <sup>(a)</sup>	Document Title	Document Date	Document Author	Document Recipient	Document Location	Area of Concern
<b>1.0 SITE ASSESSMENT</b>									
<b>1.8 Environmental Baseline Survey (EBS)</b>									
1.8		1.8-1	R	Final Report, Phase I EBS	11/18/96	Stone & Webster	U.S. Department of the Navy	A.R. File	Basewide
1.8		1.8-2	R	Revised Phase II EBS Field Report Area of Concern 35 – Pistol Range/De-arming Embankment	9/04	Stone & Webster	U.S. Department of the Navy	A.R. File	35
1.8		1.8-3	R	EBS Phase II South Weymouth Naval Air Station – Revised Project Memorandum re: AOC 35 – Pistol Range/De-armament Embankment, Groundwater Screening	9/04	Stone & Webster	U.S. Department of the Navy	A.R. File	35
<b>1.9 Work Plans</b>									
1.9		1.9-1	R	Final Phase II Environmental Baseline Survey Sampling Work Plan	10/13/98	Stone & Webster	U.S. Department of the Navy	A.R. File	Basewide
<b>3.0 REMEDIAL INVESTIGATION</b>									
<b>3.2 Sampling and Analysis Data</b>									
3.2		3.2-1	R	Final Summary Report of Background Data Summary Statistics for Naval Air Station South Weymouth, Massachusetts	2/24/00	Stone & Webster	U.S. Department of the Navy	EFANE	Basewide
3.2		3.2-2	R	Errata to the Final Summary Report of Background Data Summary Statistics	3/8/00	Stone & Webster	U.S. Department of the Navy	EFANE	Basewide
3.2		3.2-3	R	Supplement to Final Summary Report of Background Data Summary Statistics for NAS South Weymouth	11/08/02	Stone & Webster	U.S. Department of the Navy	EFANE	Basewide
<p>(a) R = Report; L = Letter; M = Meeting Minutes</p> <p>AOC = Area of Concern.</p> <p>A.R. File = Administrative Record File.</p> <p>EBS = Environmental Baseline Survey.</p> <p>EFANE = (Navy) Engineering Field Activity Northeast.</p> <p>EPA = (U.S.) Environmental Protection Agency (Region 1).</p> <p>MADEP = Massachusetts Department of Environmental Protection.</p> <p>N/A = Not Applicable.</p> <p>NAs = Naval Air Station.</p> <p>RIA = Review Item Area.</p>									

**Record of Decision**  
**Naval Air Station South Weymouth, Massachusetts**  
**Appendix D: Administrative Record Index**

File No.	Vol.	Document No.	Document Type <sup>(a)</sup>	Document Title	Document Date	Document Author	Document Recipient	Document Location	Area of Concern
<b>4.0 FEASIBILITY STUDY</b>									
<b>4.8 Proposed Plan</b>									
4.8		4.8-1	P	Final Proposed Plan, Area of Concern 35 (Pistol Range), NAS South Weymouth, Weymouth, Massachusetts	9/04	EA Engineering, Science, and Technology	U.S. Department of the Navy	A.R. File	35
<b>4.9 Correspondence</b>									
4.9		4.9-1	L	Comments on the Draft Proposed Plan	7/21/04	EPA	U.S. Department of the Navy	A.R. File	35
4.9		4.9-2	L	Comments on the Draft Proposed Plan	7/23/04	MADEP	U.S. Department of the Navy	A.R. File	35
4.9		4.9-3	R	Navy Responses to EPA and MADEP Comments on the Draft Proposed Plan <i>[included as an attachment to the draft final Proposed Plan]</i>	8/9/04	U.S. Department of the Navy	EPA, MADEP	A.R. File	35
4.9		4.9-4	L	Comments on the Draft Final Proposed Plan	8/25/04	MADEP	U.S. Department of the Navy	A.R. File	35
4.9		4.9-5	L	Comments on the Draft Final Proposed Plan	9/8/04	EPA	U.S. Department of the Navy	A.R. File	35
4.9		4.9-6	R	Navy Responses to EPA and MADEP Comments on the Draft Final Proposed Plan	9/9/04	U.S. Department of the Navy	EPA, MADEP	A.R. File	35
<b>5.0 RECORD OF DECISION</b>									
<b>5.3 Responsiveness Summaries</b>									
5.3		5.3-1	R	Transcript of the Public Hearing on the Proposed Plan for AOC 35 (included as Appendix E of the Record of Decision)	10/14/04	Public	U.S. Department of the Navy	EFANE	35
5.3		5.3-3	R	Responsiveness Summary (included as Part 3, the Responsiveness Summary, of the Record of Decision for AOC 35)	PENDING	U.S. Department of the Navy	Public	EFANE	35
<b>5.4 Record of Decision</b>									
5.4		5.4-3	R	Final Record of Decision for AOC 35, Naval Air Station South Weymouth, Massachusetts	PENDING	U.S. Department of the Navy and EPA	Public	EFANE	35
<b>5.9 Correspondence</b>									
				PENDING					

**Record of Decision**  
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File No.	Vol.	Document No.	Document Type <sup>(a)</sup>	Document Title	Document Date	Document Author	Document Recipient	Document Location	Area of Concern
<b>6.0 REMOVAL ACTIONS</b>									
6.0		6.0-1	R	Soil Sample Results for Pistol Range (Second Round).	6/21/99	Foster Wheeler Environmental Corporation	U.S. Department of the Navy	A.R. File	35
6.0		6.0-2	R	Letter report – Metals Field Sampling at Pistol Range.	6/24/99	Foster Wheeler Environmental Corporation	U.S. Department of the Navy	A.R. File	35
6.0		6.0-3	R	Draft Sampling Report for Pistol Range and Water Tower.	7/6/99	Foster Wheeler Environmental Corporation	U.S. Department of the Navy	A.R. File	15, 35
6.0		6.0-4	L	Revised figure for Pistol Range/Water Tower Sampling, Naval Air Station South Weymouth, South Weymouth, MA.	8/2/99	Foster Wheeler Environmental Corporation	U.S. Department of the Navy	A.R. File	15, 35
6.0		6.0-5	L	Revised figures for Pistol Range/Water Tower Sampling and Analytical Results for Additional Sampling at Pistol Range/Water Tower, Naval Air Station South Weymouth, South Weymouth, MA.	9/14/99	Foster Wheeler Environmental Corporation	U.S. Department of the Navy	A.R. File	15, 35
6.0		6.0-6	R	Time Critical Removal Action Memorandum for Review Item 15: Water Tower; and Review Item 35: Pistol Range. Revision 2. <i>[includes responses to EPA/MADEP comments on the draft Action Memo &amp; Closeout Report]</i>	6/7/00	Foster Wheeler Environmental Corporation	U.S. Department of the Navy	A.R. File	15, 35
6.0		6.0-7	R	Draft Cleanup Activity Report for the Time Critical Removal Action, Review Item 35: Pistol Range Lead Soil removal. <i>[also issued as Appendix A of the Final Closeout Report of 3/30/04]</i>	6/23/00	Foster Wheeler Environmental Corporation	U.S. Department of the Navy	A.R. File	35
6.0		6.0-8	L	Final Response to Comments (EPA and MADEP comments on the October 1999 Draft Action Memorandum) – Pistol Range, Naval Air Station South Weymouth, South Weymouth, MA.	6/22/01	Foster Wheeler Environmental Corporation	U.S. Department of the Navy	A.R. File	35
6.0		6.0-9	R	Final Closeout Report for Pistol Range and De-armament Embankment Removal, former Naval Air Station, South Weymouth, MA.	3/30/04	Tetra Tech FW, Inc.	U.S. Department of the Navy	A.R. File	35

**Record of Decision**  
**Naval Air Station South Weymouth, Massachusetts**  
**Appendix D: Administrative Record Index**

File No.	Vol.	Document No.	Document Type <sup>(a)</sup>	Document Title	Document Date	Document Author	Document Recipient	Document Location	Area of Concern
<b>6.8 Work Plans</b>									
6.8		6.8-1	L	Pistol Range Sampling and Remediation, Transmittal of Draft Master Site Health & Safety Plan and Attachment A to the Site Specific Health and Safety Plan.	6/25/98	Foster Wheeler Environmental Corporation	U.S. Department of the Navy	A.R. File	35
6.8		6.8-2	R	Final Phase II EBS Work Plan (Rev. 1).	10/13/98	Stone & Webster	U.S. Department of the Navy	A.R. File	35
6.8		6.8-3	R	Condensed Work Plan for the Pistol Range Site in the Town of Weymouth. Revision: 0.	4/20/99	Foster Wheeler Environmental Corporation	U.S. Department of the Navy	A.R. File	35
6.8		6.8-4	R	Final Work Plan – Pistol Range, Naval Air Station, South Weymouth, MA.	4/26/99	Foster Wheeler Environmental Corporation	U.S. Department of the Navy	A.R. File	35
6.8		6.8-5	R	Final Pistol Range Work Plan with RTCs	5/11/99	Foster Wheeler Environmental Corporation	U.S. Department of the Navy	A.R. File	35
<b>6.9 Correspondence</b>									
6.9		6.9-1	L	Review of Draft Pistol Range Work Plan, Naval Air Station South Weymouth.	8/21/98	EPA	U.S. Department of the Navy	A.R. File	35
6.9		6.9-2	L	Comments on Draft Sampling Investigation Closeout Report Pistol Range/Water Tower	11/17/99	EPA	U.S. Department of the Navy	A.R. File	35
6.9		6.9-3	L	Comments on the draft Action Memo	11/29/99	MADEP	U.S. Department of the Navy	A.R. File	35
6.9		6.9-4	L	Comments on the draft Action Memo	12/13/99	EPA	U.S. Department of the Navy	A.R. File	35
6.9		6.9-5	L	Comments on the draft Cleanup Activity Report for the Time Critical Removal Action, Review Item 35: Pistol Range Lead Soil Removal dated June 2000	8/15/00	MADEP	U.S. Department of the Navy	A.R. File	35
6.9		6.9-6	L	Comments on the Closeout Report for Pistol Range and De-armament Embankment Removal, dated March 30, 2004.	5/6/04	MADEP	U.S. Department of the Navy	A. R. File	35
6.9		6.9-7	L	Comments on the Final Closeout Report for the Pistol Range and De-armament Removal	6/17/04	EPA	U.S. Department of the Navy	A. R. File	35

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**Naval Air Station South Weymouth, Massachusetts**  
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File No.	Vol.	Document No.	Document Type <sup>(a)</sup>	Document Title	Document Date	Document Author	Document Recipient	Document Location	Area of Concern
6.9		6.9-8	L	Response to MADEP Comments to the Draft Cleanup Activity Report for the Time Critical Removal Action Review Item 35 Pistol Range Lead Soil Removal	9/15/04	Tetra Tech FW, Inc.	MADEP	A. R. File	35
6.9		6.9-9	L	Response to USEPA and MADEP Comments to the Final Closeout Report for Pistol Range and De-armament Embankment Removal	9/16/04	Tetra Tech FW, Inc.	MADEP	A. R. File	35
<b>10.0 ENFORCEMENT/NEGOTIATION</b>									
<b>10.16 Federal Facility Agreements</b>									
10.16		10.16-1	L	Federal Facility Agreement for South Weymouth Naval Air Station National Priorities List Site	4/00	EPA	U.S. Department of the Navy	EFANE	Basewide
<b>13.0 COMMUNITY RELATIONS</b>									
<b>13.2 Community Relations Plan</b>									
13.2		13.2-1	R	Community Relations Plan Naval Air Station South Weymouth, Massachusetts	7/98	U.S. Department of the Navy	Public	EFANE	Basewide
<b>13.4 Public Meetings/Hearings</b>									
13.4		13.4-1	R	Restoration Advisory Board Workshop Guidebook	7/94	EPA	Public	EFANE	Basewide
13.4		13.4-2	L	Public Notice: Notification of Restoration Advisory Board Meetings (Monthly)	1995-2004	EA Engineering, Science, and Technology	Public	EFANE	Basewide
13.4		13.4-3	M	Restoration Advisory Board Meeting Minutes (Monthly)	1995-2004	U.S. Department of the Navy	Public	EFANE	Basewide
<b>13.5 Fact Sheets/Information Updates</b>									
13.5		13.5-1	L	Public Notice: Public Information and Public Hearing for the AOC 35 Proposed Plan	9/04	EA Engineering, Science, and Technology	Public	A.R. File	35
13.5		13.5-2	L	Legal Notice, Record of Decision Available For AOC 35, Naval Air Station South Weymouth, Weymouth, Massachusetts	PENDING	EA Engineering, Science, and Technology	Public	A.R. File	35

**Record of Decision**  
**Naval Air Station South Weymouth, Massachusetts**  
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File No.	Vol.	Document No.	Document Type <sup>(a)</sup>	Document Title	Document Date	Document Author	Document Recipient	Document Location	Area of Concern
<b>13.6 Mailing List</b>									
13.6		13.6-1	N/A	Community Relations Mailing List: State, Federal and Local Agencies (including Media and Public Libraries)	N/A	U.S. Department of the Navy	N/A	EFANE	Basewide
13.6		13.6-2	N/A	Community Relations Mailing List: Other Parties (e.g., general public) – CONFIDENTIAL (due to potential Privacy Act violations)	N/A	U.S. Department of the Navy	N/A	EFANE	Basewide

**Record of Decision  
Naval Air Station South Weymouth, Massachusetts  
Appendix E: Transcript of Public Hearing on the Proposed Plan for  
AOC 35 – Pistol Range**

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**APPENDIX E: TRANSCRIPT OF PUBLIC HEARING ON THE PROPOSED PLAN  
FOR AOC 35 – PISTOL RANGE**

Refer to attached copy.

Superior Records Center  
SITE: So. Weymouth  
BREAK: 5-3  
OTHER: \_\_\_\_\_

PROPOSED PLAN FOR  
PISTOL RANGE (AOC 35)

Public Hearing  
Naval Air Station South Weymouth  
October 14, 2004 8:30 p.m.

Leavitt Reporting, Inc.

1207 Commercial Street, Rear  
Weymouth, MA 02189

Tel. 781-335-6791  
Fax: 781-335-7911  
leavittreporting@att.net

Hearings ♦ Conferences ♦ Legal Proceedings

1           (The public hearing for the Proposed Plan  
2     for the Pistol Range (AOC 35) convened at the Naval  
3     Air Station South Weymouth, MA, October 14, 2004, at  
4     8:30 p.m.)

5           MR. LEIPERT: I would like to welcome  
6     everybody to the public hearing for the Pistol Range  
7     AOC 35 at the former Naval Air Station South  
8     Weymouth. My name is Mark Leipert. I'm the  
9     project manager.

10          Tonight the Navy is proposing no  
11     further action at the pistol range, where we've  
12     taken removal action, removed contaminated soil from  
13     the pistol range and de-armament embankment has been  
14     removed to ensure no UXOs exist or no munitions  
15     compounds exist, and that there is no impact to the  
16     groundwater from the former pistol range or the  
17     de-armament embankment.

18          Tonight you'll have an opportunity to  
19     comment on the proposed plan. And what I would like  
20     is before we start the actual public comment period,  
21     I would like to hear a statement from EPA and the  
22     State as far as what their feeling is toward this  
23     proposed plan.

1 MS. PATTY WHITEMORE (EPA): The Navy  
2 has removed the pistol range in the removal action.  
3 As a result of the removal action, there is no risk  
4 to human health and environment. For this reasons  
5 the EPA concurs with the Navy's plan of no further  
6 action.

7 MR. DAVID CHAFFIN (DEP): DEP believes  
8 that the proposed no further action decision is  
9 appropriate.

10 MR. LEIPERT: Thank you. If you have  
11 a comment tonight, I would like to ask you to come  
12 up to the podium and state your name, spell your  
13 name, and then slowly say your comment. We'll not  
14 be responding to your comment tonight. The response  
15 to your comment will be in the responsive summary  
16 that will be attached to the final ROD. So if  
17 anybody has any comments, if you would like to, you  
18 could write your comment down on the piece of paper  
19 that was provided in the proposed plan, or at this  
20 time you can come forward to the podium and state  
21 your comment.

22 Anybody? Anybody? Don't be shy.  
23 Anybody?

1 MR. KEN HAYES (RAB): I have a comment.  
2 It doesn't need an explanation other than how we're  
3 going to deal with the constituents that have been  
4 found in the VOC underlying removal action that is  
5 no further action. How does that, how do the two  
6 conflicting sites on that where we found VOCs I  
7 believe in some of the wells that were driven, as  
8 your plan, your plan of action found VOCs from  
9 another site, that is coming onto the pistol range  
10 area, how does that relate to this final action here  
11 of no further action?

12 MR. LEIPERT: You want an answer? I'm  
13 not really supposed to, as part of the public  
14 hearing, I'm not supposed to respond, but I can talk  
15 to you. You know we're conducting an investigation.

16 MR. HAYES: Does the no further action  
17 have any relationship to the constituents that have  
18 been found underlying it, the removal action or  
19 whatever? I don't know how to phrase that question.

20 MR. LEIPERT: I can talk to you.

21 MR. HAYES: Ken Hayes, Weymouth RAB.

22 MR. LEIPERT: All right. Anybody else?  
23 All right. That ends our public comment period.

1 Th ank you very much for coming. You can still  
2 submit comments until October 20th.

3 (Public hearing ended at 8:40 p.m.)  
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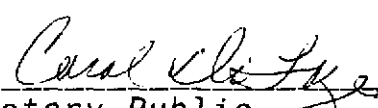
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